

San Ace 92 GA type

DC Fan 92mm

Features

Large air flow and high static pressure

Maximum airflow : increased by approx. 25%
 Maximum static pressure : increased by approx. 58 % compared with our conventional product*.

Energy-saving

Power consumption is reduced by approx. 17 % with airflow performance that is identical to our conventional product*.

Low noise

Sound pressure level is reduced by approx. 8 % with airflow performance that is identical to our conventional product*.

* Our conventional product is the DC cooling fan :
 92 x 92 x 25 mm thick fan "San Ace 92" (9AH0912P4G03)



92 × 92 × 25mm

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]				
9GA0912P4J03 (031)	12	10.2 to 13.8	100	0.39	4.68	5,000	2.20	77.7	105	0.42	43	-10 to +70	60,000				
			0	0.06	0.72	1,500	0.66	23.3	9.5	0.04	14						
			9GA0912P4G03 (031)	100	0.28	3.36	4,400	1.93	68.2	81	0.33			39			
				0	0.06	0.72	1,500	0.66	23.3	9.5	0.04			14			
9GA0912P4S03 (031)			100	0.2	2.4	3,800	1.67	59.0	60.6	0.24	35						
			0	0.06	0.72	1,500	0.66	23.3	9.5	0.04	14						
9GA0924P4J03 (031)			24	20.4 to 27.6	100	0.2	4.80	5,000	2.20	77.7	105			0.42	43	-10 to +70	60,000
					0	0.04	0.96	1,500	0.66	23.3	9.5			0.04	14		
	9GA0924P4G03 (031)	100			0.15	3.60	4,400	1.93	68.2	81	0.33	39					
		0			0.04	0.96	1,500	0.66	23.3	9.5	0.04	14					
9GA0924P4S03 (031)	100	0.12			2.88	3,800	1.67	59.0	60.6	0.24	35						
	0	0.04			0.96	1,500	0.66	23.3	9.5	0.04	14						

The numbers in () represent ribless models.

※PWM Frequency:25kHz

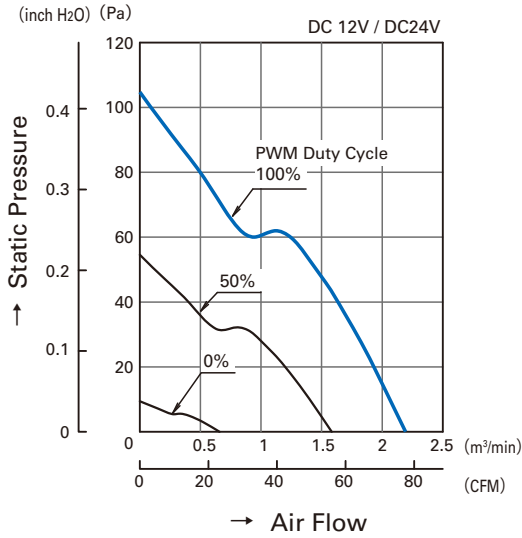
Common Specifications

- Material Frame: Plastics (Flammability: UL94V-0) , Impeller: Plastics (Flammability: Min.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 Varies for each model (Non-condensing)
- Storage Temperature -30°C to +70°C (Non-Condensing)
- Lead Wire ⊕red ⊖black Sensor: yellow Control: brown
- Mass 125g

92mm

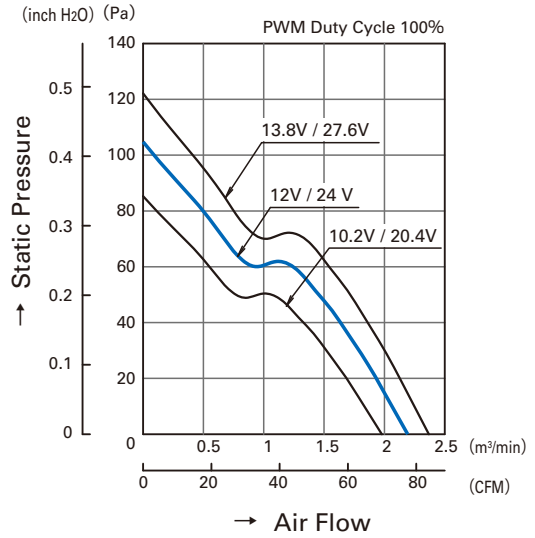
Air Flow and Static Pressure Characteristics

• PWM Duty Cycle

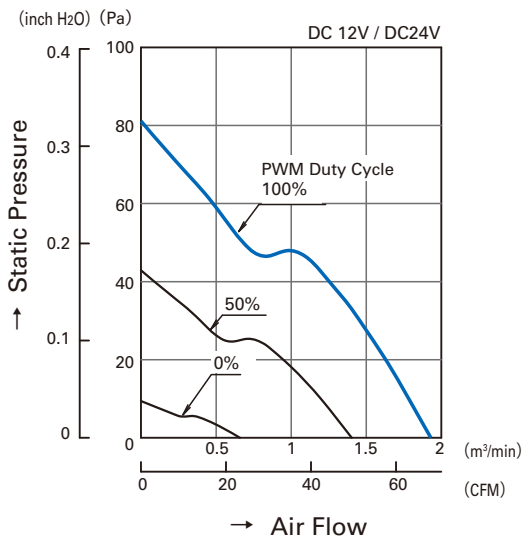


9GA0912P4J03 (031)
9GA0924P4J03 (031)

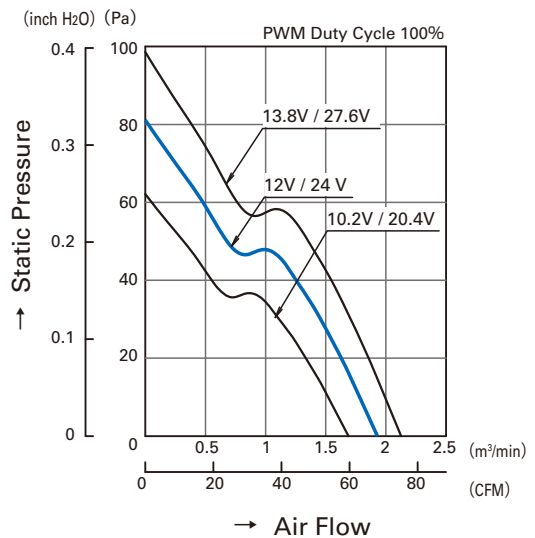
• Operating Voltage Range



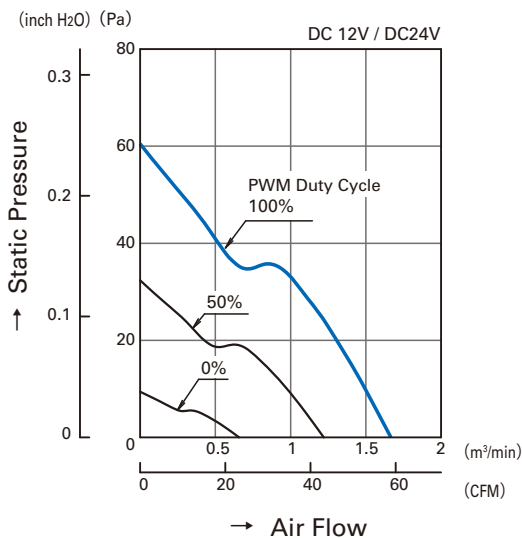
9GA0912P4J03 (031)
9GA0924P4J03 (031)



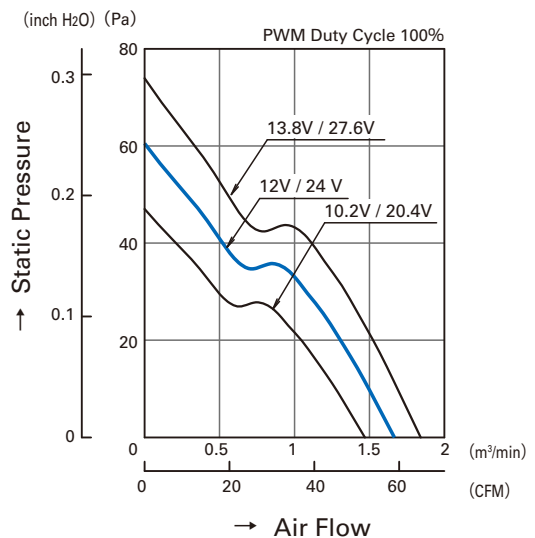
9GA0912P4G03 (031)
9GA0924P4G03 (031)



9GA0912P4G03 (031)
9GA0924P4G03 (031)

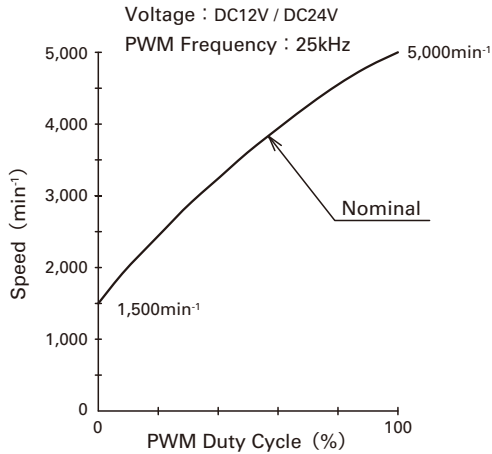


9GA0912P4S03 (031)
9GA0924P4S03 (031)

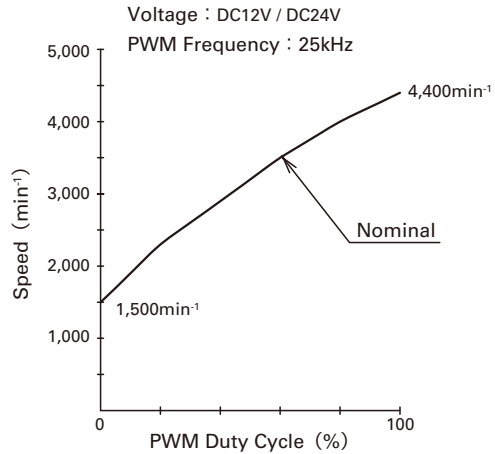


9GA0912P4S03 (031)
9GA0924P4S03 (031)

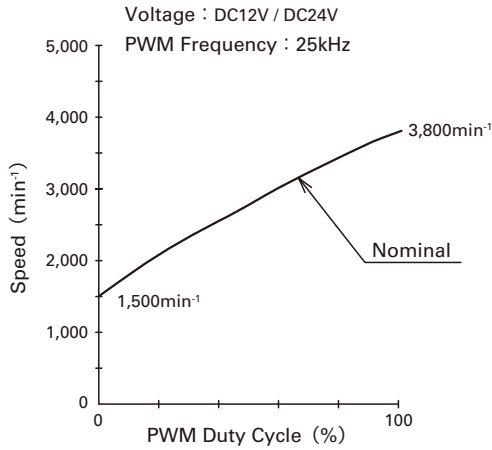
PWM Duty - Speed Characteristics Example



9GA0912P4J03 (031)
9GA0924P4J03 (031)

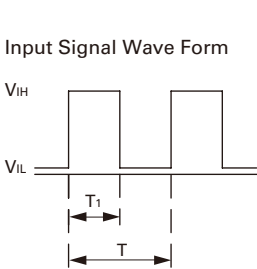


9GA0912P4G03 (031)
9GA0924P4G03 (031)



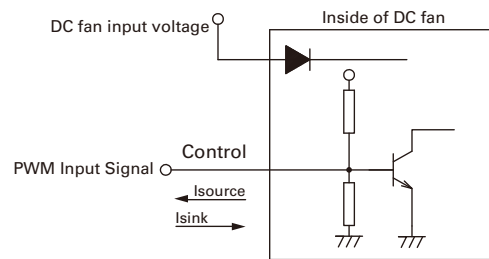
9GA0912P4S03 (031)
9GA0924P4S03 (031)

PWM Input Signal Example



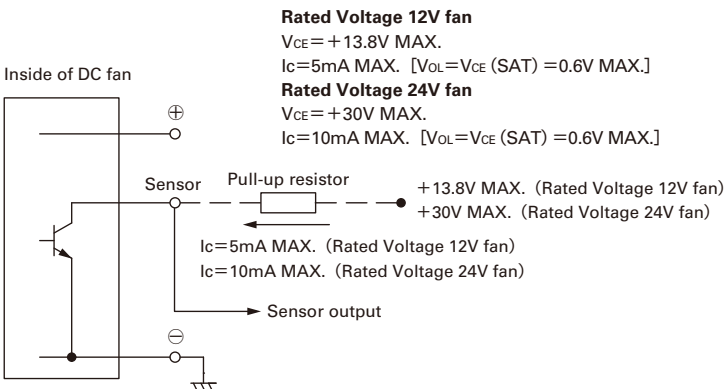
$V_{IH}=4.75V$ to $5.25V$
 $V_{IL}=0V$ to $0.4V$
PWM Duty Cycle (%) = $\frac{T_1}{T} \times 100$
PWM Frequency 25 (kHz) = $\frac{1}{T}$
Source Current : 1mA Max. at control voltage 0V
Sink Current : 1mA Max. at control voltage 5.25V
Control Terminal Voltage : 5.25V Max. (Open Circuit)
When the control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

Connection Schematic

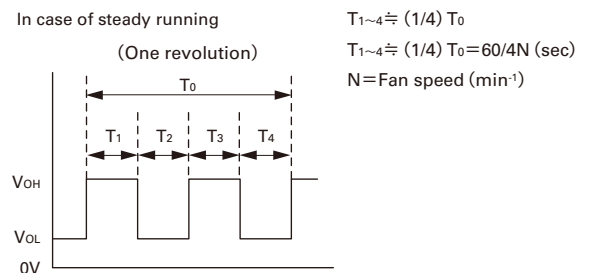


Specifications for Pulse Sensors

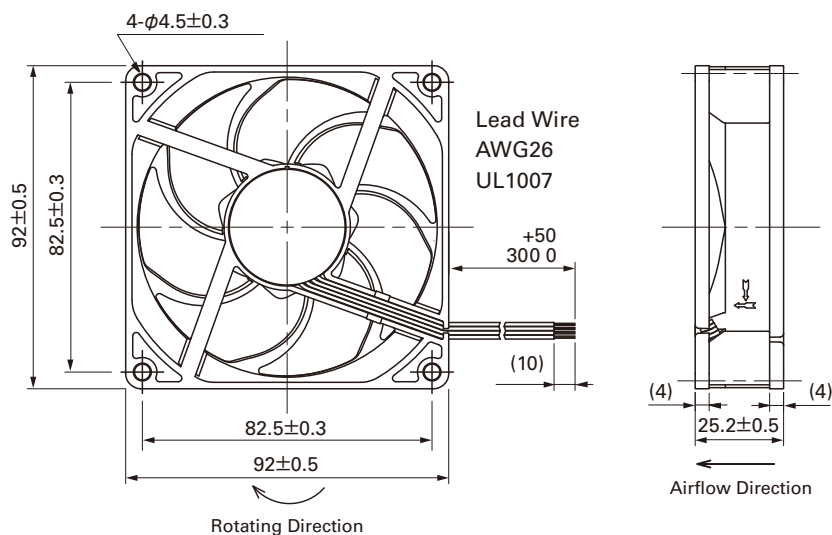
Output circuit : Open collector



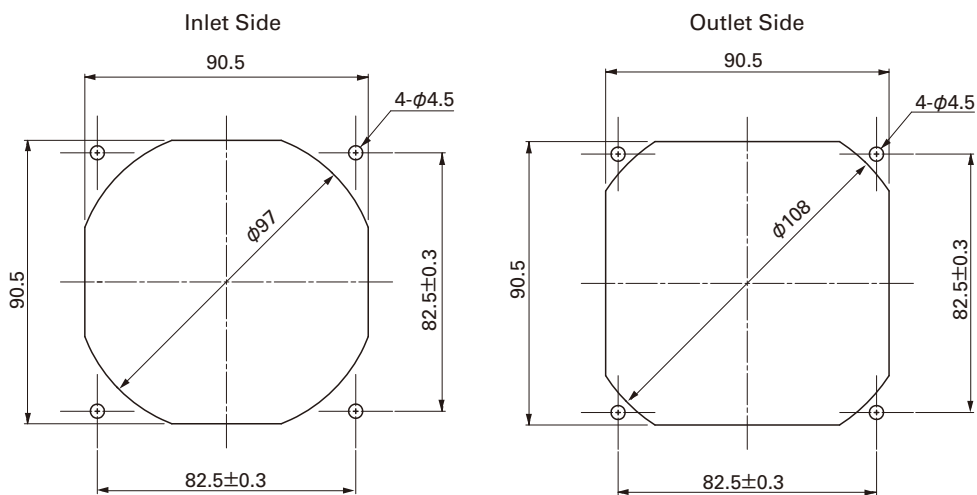
Output waveform (Need pull-up resistor)



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.