

San Ace 40 CRA type Counter Rotating Fan

Features

Large air flow and high static pressure

- Reduced thickness by approx. 14% compared with our conventional products*.
- Maximum airflow: increased by approx. 2%
- Maximum static pressure: increased by approx. 14%

* Our conventional product is the DC cooling fan :
40 mm square × 56 mm thick fan "San Ace 40" (9CRA0412J502)



40mm square × 48mm thick

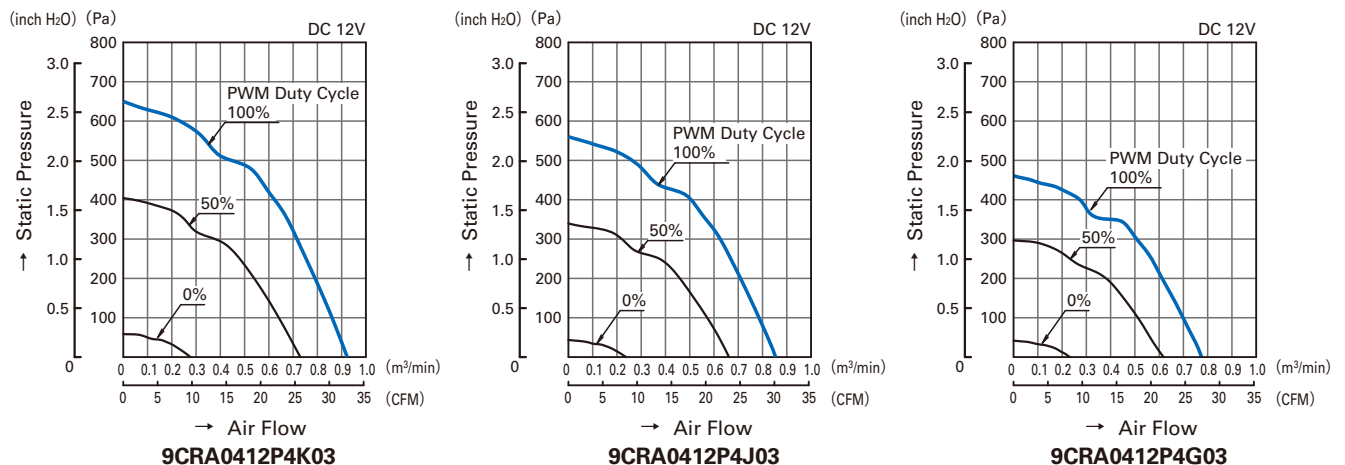
Specifications

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)		Noise (dB[A])	Operating Temperature Range (°C)	Life Expectancy (h)
						Inlet	Outlet							
9CRA0412P4K03	12	10.8 to 13.2	100	1.60	19.20	17500	11700	0.920	32.50	650.0	2.610	64	-10 to +70	30,000
			0	0.19	2.28	5250	3510	0.276	9.75	58.5	0.235	33		
100			1.20	14.40	16200	10800	0.850	30.00	560.0	2.250	62	40,000		
0			0.15	1.80	4500	3000	0.236	8.33	43.2	0.173	28			
9CRA0412P4J03			100	1.00	12.00	14700	9800	0.770	27.20	460.0	1.850	59		40,000
9CRA0412P4G03			0	0.15	1.80	4410	2940	0.231	8.16	41.4	0.166	28		40,000

※PWM Frequency : 25kHz

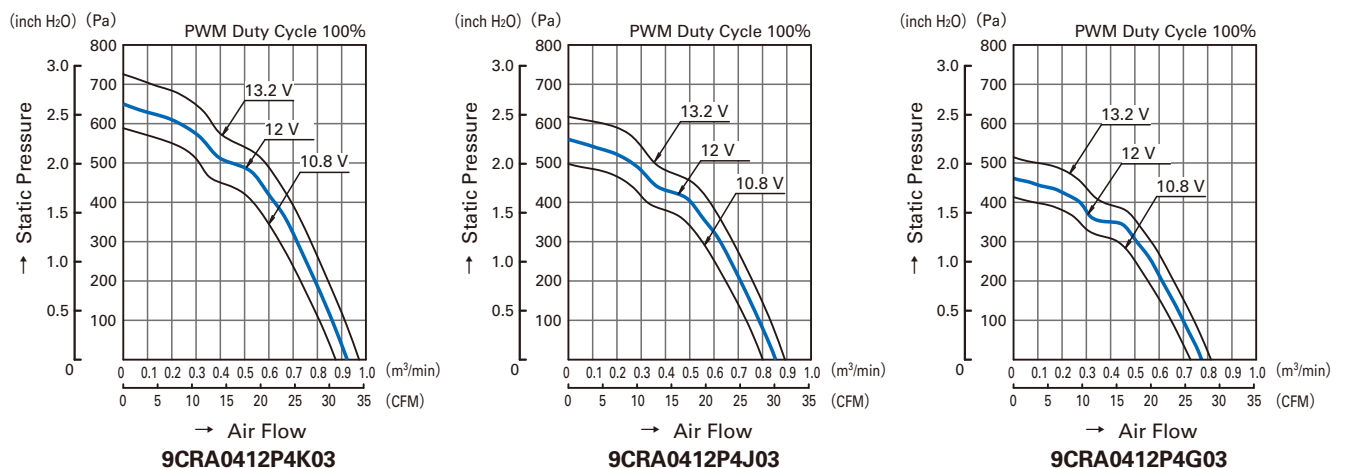
Air Flow and Static Pressure Characteristics

· PWM Duty Cycle

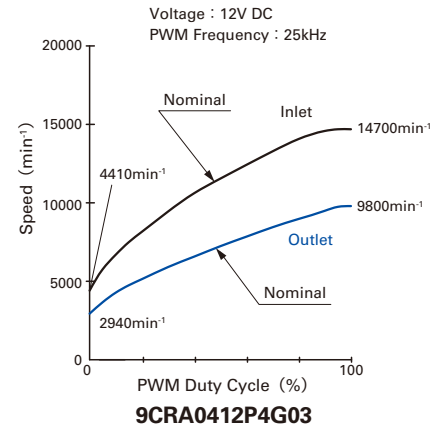
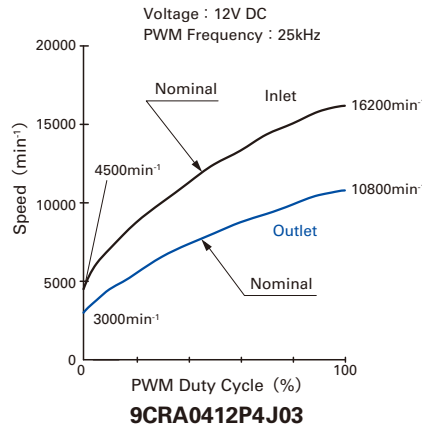
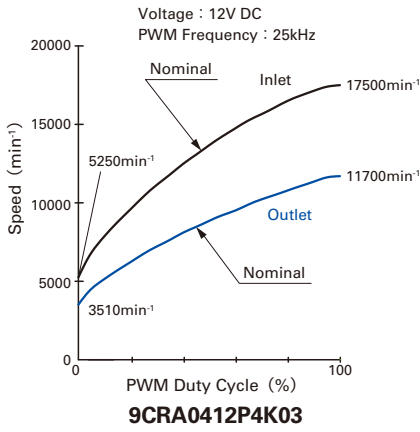


40mm

· Operating Voltage Range

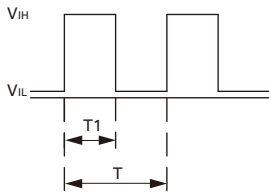


■ PWM Duty - Speed Characteristics Example



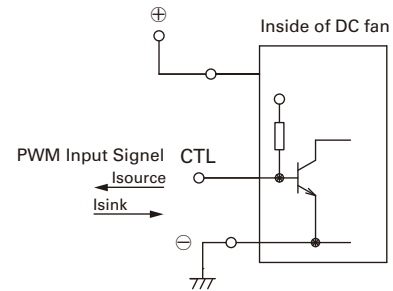
■ PWM Input Signal Example

Input Signal Wave Form

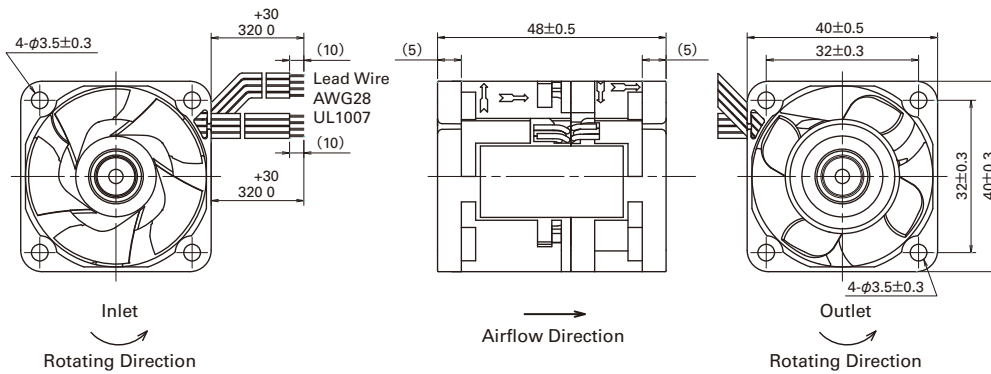


$V_{IH}=2.8V$ to $3.8V$
 $V_{IL}=0V$ to $0.4V$
 PWM Duty Cycle (%) = $\frac{T1}{T} \times 100$
 PWM Frequency 25 (kHz) = $\frac{1}{T}$
 Source Current : 2mA Max. at control voltage 0V
 Sink Current : 2mA Max. at control voltage 3.8V
 Control Terminal Voltage : 3.8V Max. (Open Circuit)

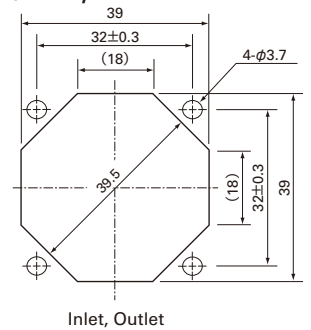
■ Connection Schematic



■ 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 Inlet ⊕red ⊖black Sensor: yellow Control: brown
Outlet ⊕orange ⊖gray Sensor: purple Control: white
- Mass 80g

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.