

San Ace 60

CRA type Counter Rotating Fan

Counter Rotating Fan 60mm

Features

High Air Flow and High Static Pressure

Even with a thickness 20 mm less, the maximum air flow of this fan is approximately 1.1 times and its maximum static pressure is approximately 1.1 times greater than that of our conventional counter rotating fan.*

This contributes to space optimization in devices.

* : Specification of Model No. 9CRA0612P6K001. Our conventional counter rotating fan is 60 x 60 x 76 mm "San Ace 60" CRA type, Model No. 9CRA0612P0G001.



60×60×56_{mm}

Specifications

Model No.	Rated Voltage [V]	Operating Voltage Range [V]	PWM Duty Cycle [%] ^{Note1)}	Rated Current [A]	Rated Input [W]	Rated Speed [min ⁻¹] Inlet Outlet	Max. Air Flow [m ³ /min] [CFM]	Max. Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life [h] ^{Note2)}
9CRA0612P6K001	12	10.8 to 13.2	100	3.10	37.2	18,300 15,800	2.28 80.5	1,130 4.54	73	-20 to +70	30,000/60°C
			0	0.17	2.0	3,800 3,300	0.47 16.6	49 0.20	35		
9CRA0612P6J001			100	2.30	27.6	16,800 14,500	2.10 74.2	950 3.82	70		40,000/60°C (70,000/40°C)
			0	0.15	1.8	3,800 3,300	0.47 16.6	49 0.20	35		
9CRA0612P6G001			100	1.30	15.6	13,500 11,400	1.65 58.3	620 2.49	65		
			0	0.10	1.2	3,000 2,500	0.36 12.7	31 0.12	29		

Note1 : PWM Frequency : 25kHz

Note2 : Expected life at 40°C ambient is just reference value.

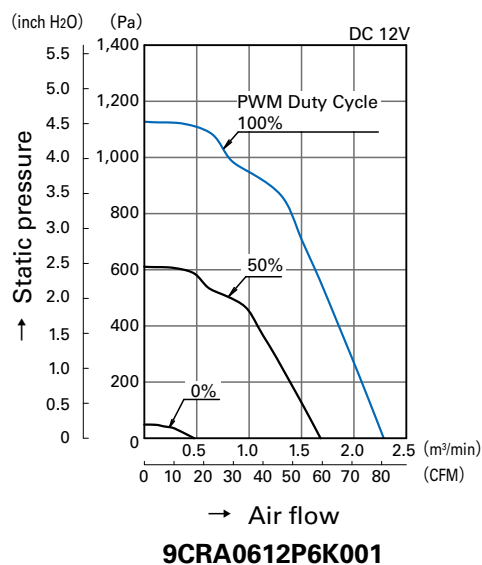
Common Specifications

- ☐ 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 Inlet: ⊕Red ⊖Black Sensor: Yellow Control: Brown
Outlet: ⊕Orange ⊖Gray Sensor: Purple Control: White
- ☐ Mass Approx. 200g

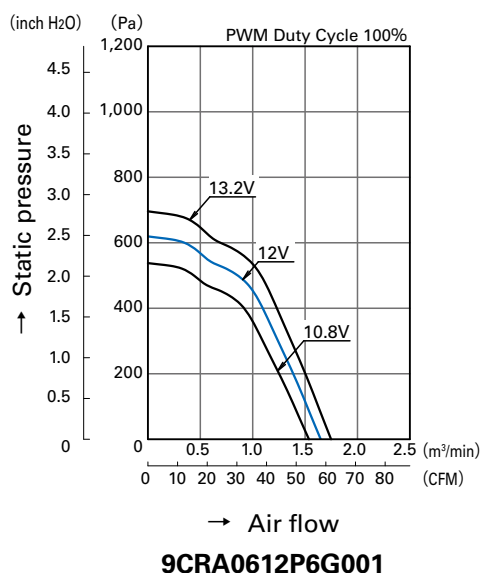
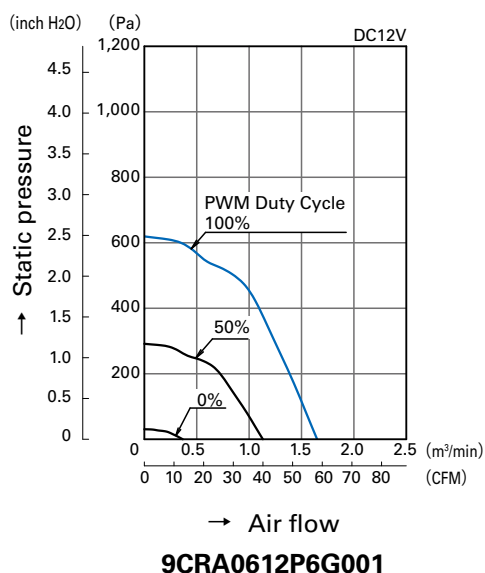
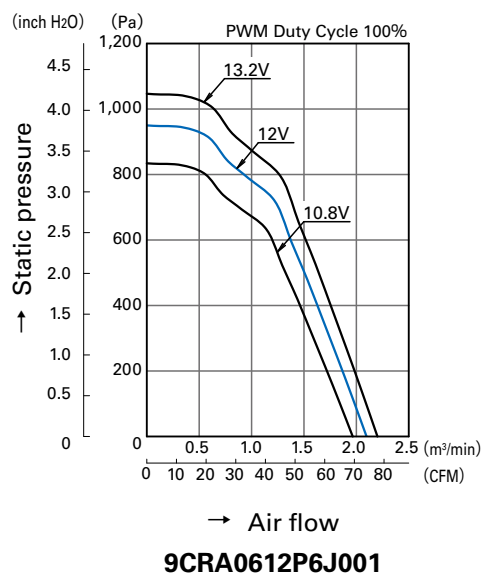
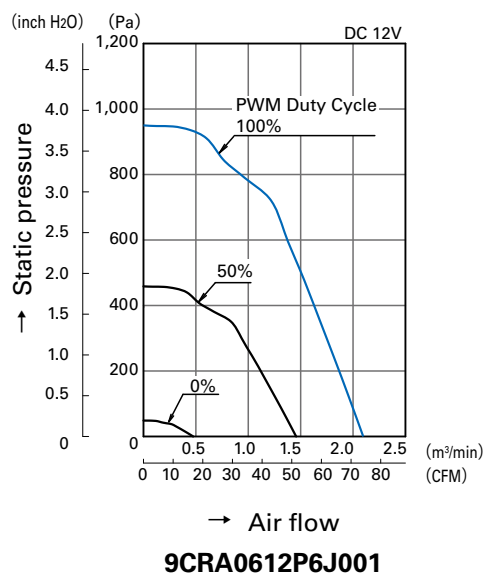
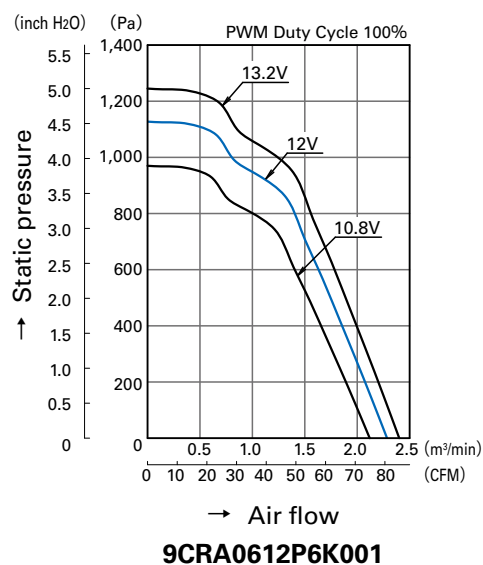
60mm

Air Flow - Static Pressure Characteristics

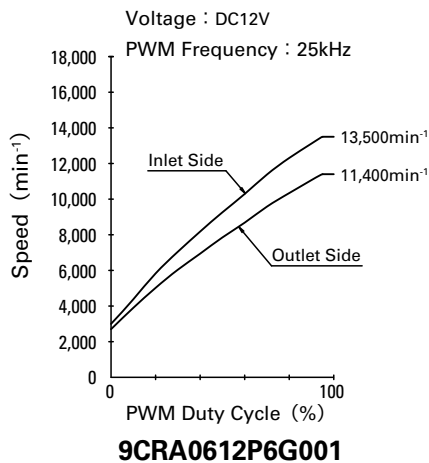
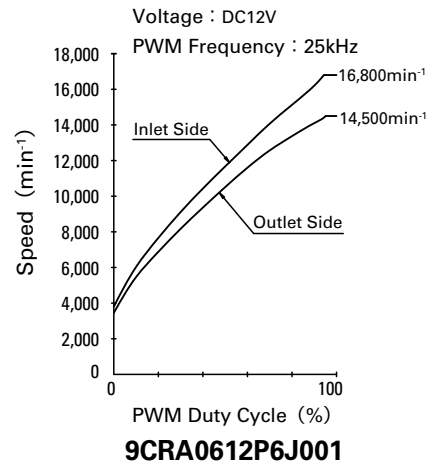
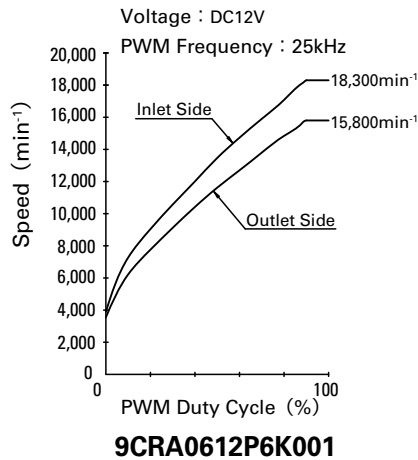
• PWM Duty Cycle



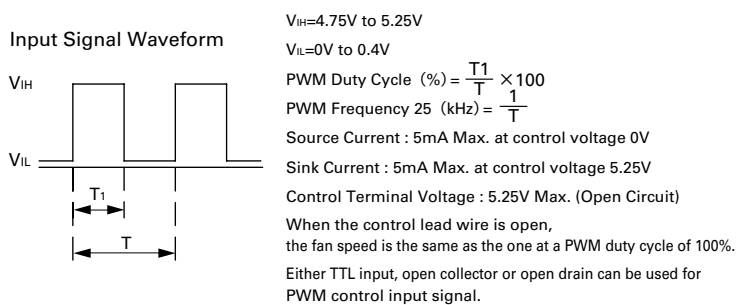
• Operating Voltage Range



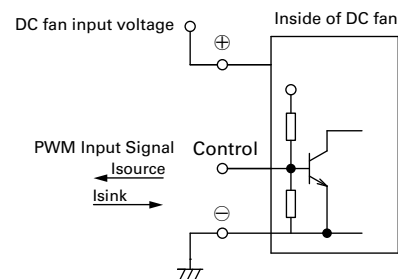
PWM Duty - Speed Characteristics Example



PWM Input Signal Example



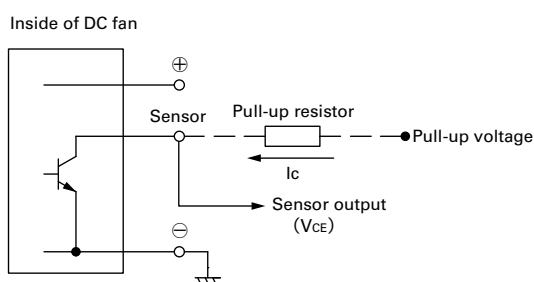
Example of Connection Schematic



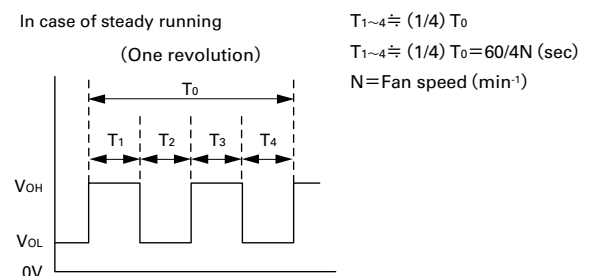
Specifications for Pulse Sensors

Output circuit : Open collector

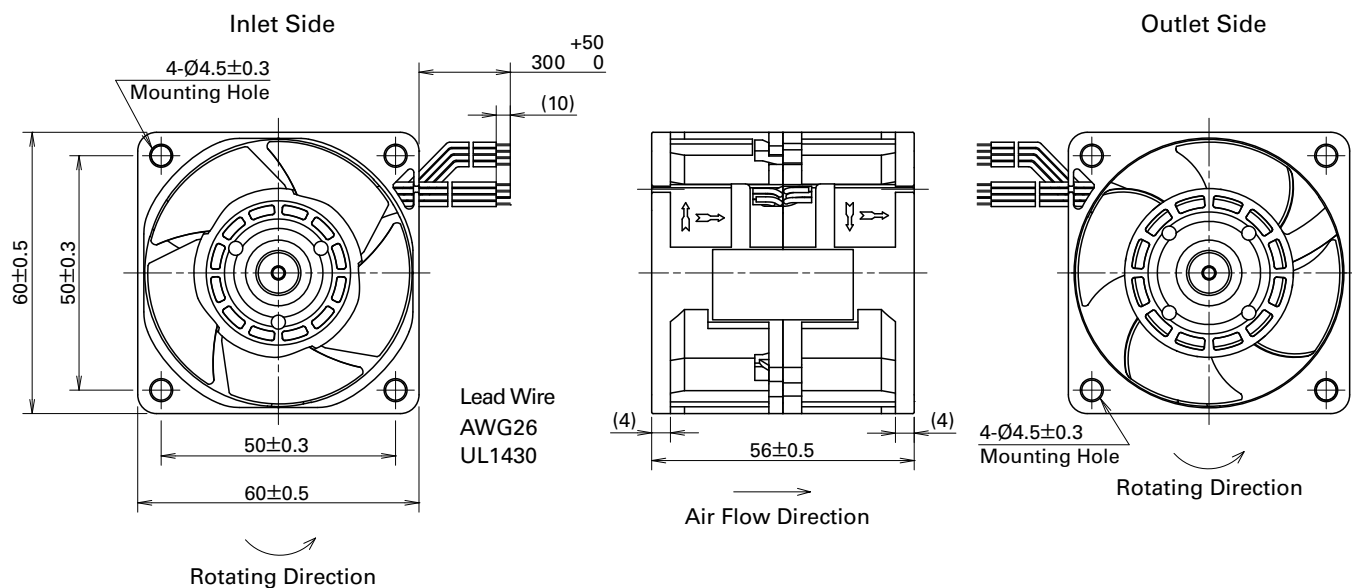
$V_{CE} = +13.8V$ MAX.
 $I_C = 10mA$ MAX. [$V_{OL} = V_{CE} (SAT) = 1.0V$ MAX.]



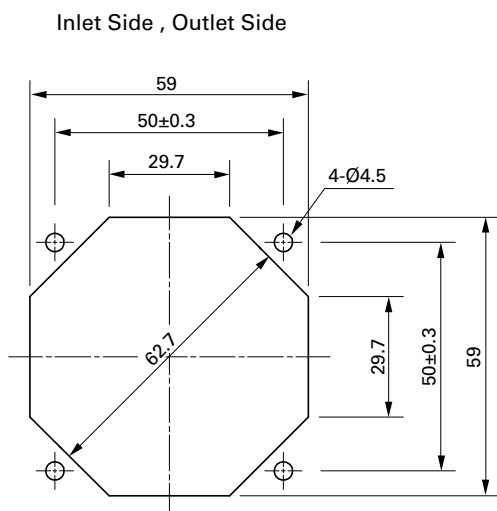
Output Waveform (Need pull-up resistor)



■ Dimensions (unit : mm)



■ 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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