Counter Rotating Fan

80×80×80 mm

San Ace 80 9CRE type Low Vibration Fan cULus △

■ General Specifications

· Material .... Frame: Aluminum, Impeller: Plastic (Flammability: UL 94V-1)
· Expected life .... See the table below. (L10 life: 90% survival rate for continuous operation in free air at 60°C, rated voltage) Expected life at 40°C is for reference only.
· Motor protection function .... Locked rotor burnout protection, Reverse polarity protection For details, please refer to p. 608.
· Dielectric strength .... 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
· Insulation resistance .... 10 MΩ min. at 500 VDC (between lead wire conductors and frame)
· Sound pressure level (SPL) .... A-weighted sound pressure level (SPL) at 1 m away from the air inlet.
· Storage temperature .... -30 to +70°C (Non-condensing)
· Lead wire .... Inlet ⊕Red ⊖Black [Sensor] Yellow [Control] Brown
  Outlet ⊕Orange ⊖Gray [Sensor] Purple [Control] White
· Mass .... 490 g

■ Specifications

The models listed below **have a pulse sensor with PWM control.**
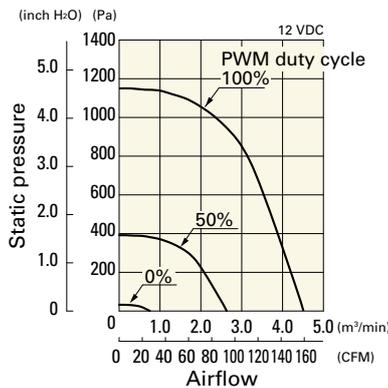
Model no.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle* [%]	Rated current [A]	Rated input [W]	Rated speed [min⁻¹]		Max. airflow		Max. static pressure		SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
						Inlet	Outlet	[m³/min]	[CFM]	[Pa]	[inchH₂O]			
9CRE0812P8G001	12	10.8 to 13.2	100	5.3	63.6	12000	11300	4.5	158.9	1150	4.62	76	-20 to +70	40000/60°C (70000/40°C)
			0	0.2	2.4	2000	1900	0.74	26.1	31.9	0.13	30		

PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.
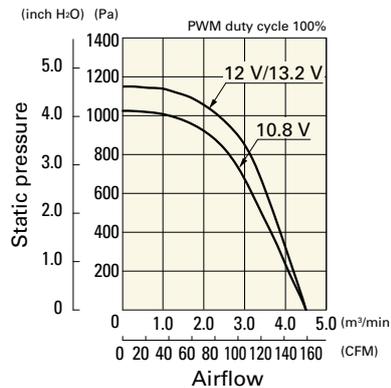
■ Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example
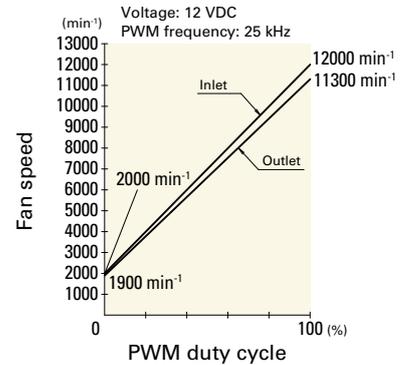
9CRE0812P8G001 With pulse sensor with PWM control
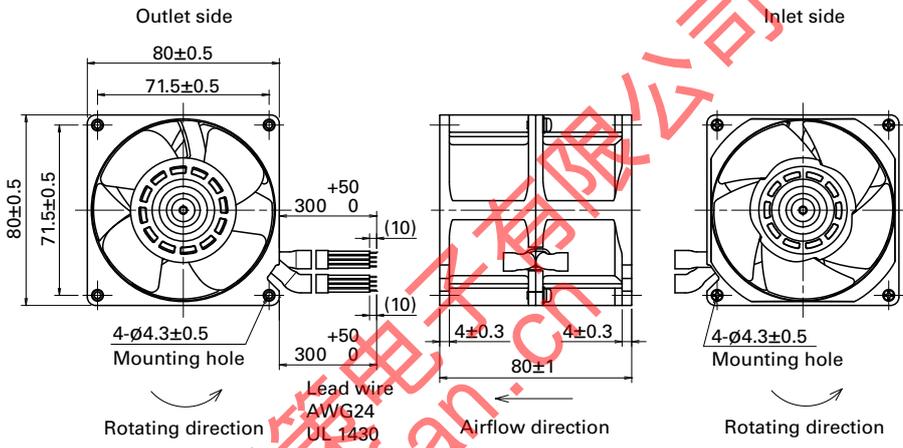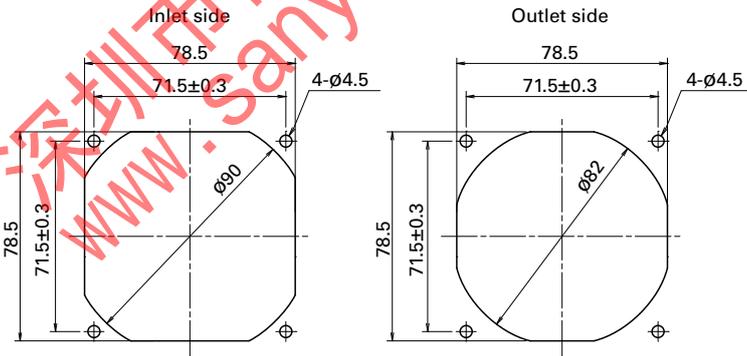
PWM duty cycle

Operating voltage range

PWM duty - Speed characteristics example

■ Dimensions (unit: mm)

Outlet side

Inlet side

80±0.5
71.5±0.5
80±0.5
71.5±0.5

300 +50 / 0

(10)

(10)

300 +50 / 0

4-Ø4.3±0.5
Mounting hole

Rotating direction

Lead wire
AWG24
UL 1430

4±0.3   4±0.3

80±1

Airflow direction

4-Ø4.3±0.5
Mounting hole

Rotating direction

■ Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)

Inlet side

78.5
71.5±0.3
4-Ø4.5

78.5
71.5±0.3

Ø90

Outlet side

78.5
71.5±0.3
4-Ø4.5

78.5
71.5±0.3

Ø82

■ Options

Finger guards	page: p. 590

Model no.: 109-049E, 109-049H

Resin finger guards	page: p. 597

Model no.: 109-1002G

Resin filter kits	page: p. 598

Model no.: 109-1002F13 (13PPI), 109-1002F20 (20PPI),
109-1002F30 (30PPI), 109-1002F40 (40PPI)